



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

15 West Yakima Avenue, Suite 200 • Yakima, Washington 98902-3452 • (509) 575-2490

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FEDERAL ENERGY
REGULATORY COMMISSION

October 10, 2003

CERTIFIED MAIL
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Reid Brown
Relicensing Project Manager
Trinity Hydropower Project
3139 E. Lake Samammish SE
Samammish, WA 98075

RE: Trinity Hydropower Project (FERC No. 719)
401 Certification / Order No. DE 03WQCR-5800

Dear Mr. Brown:

The request for certification for the licensing of the Trinity Hydropower Project (FERC #719), Chelan County, Washington, has been reviewed. On behalf of the State of Washington, we certify that the project, as conditioned by the enclosed Order, will comply with applicable provisions of 33 USC 1311, 1312, 1313, 1316, 1317 and other appropriate requirements of State law.

The certification conditions are contained in the enclosed Order. If you have any questions, please contact Pat Irle at (509) 454-7864. Written comments and correspondence relating to this document should be directed to Section Manager, Water Quality Program, Department of Ecology, Central Regional Office, 15 W. Yakima Avenue, Suite 200, Yakima, WA 98902. The enclosed Order may be appealed by following the procedures described.

Sincerely,

G. Thomas Tebb, L.E.G.
Section Manager
Water Quality Program

GTT:ww

Enclosure

cc: Rod Mace, USFS
Walt Dortch, USFS
Tony Eldred, WDFW
H. Bruce Butts, Trinity Conservancy Inc.
Jocelyn Somers, USDA
William Frymire, WA Attorney General's Office
FERC Coordinator, USFS

3. Conformance with any and all applicable provisions of Chapter 90.48 RCW and of using all known, available and reasonable methods to prevent and control pollution of state waters as required by RCW 90.48.010.

FINDINGS:

- A. The Trinity Power Project was originally constructed in 1924 to support the Red Mountain Copper Mine. The mine ceased operation in the 1930s.
- B. The plant is currently being used to meet the electrical needs of approximately four households. Although the nameplate capacity is 240 kW, the project currently is used to produce between 25 to 75 kW.
- C. Primary fish of concern in the vicinity are spring Chinook, steelhead and bull trout. Phelps Creek is flow limited, meaning that the flows needed for the preferred depths and velocities of these fish do not normally occur during the low flow months. Thus it is desirable to minimize the amount of water diverted during the low flow months (August-Oct 15) and return it as far upstream in Phelps Creek as feasible. Daily maximum temperatures in Phelps Creek did not exceed 16 °C for the years 1999 to 2001.
- D. A combination of measures have been identified that would return increased flows in the bypassed portion of Phelps Creek. Essentially, these measures will return the lower portion of Phelps Creek to its natural flow during the low flow months. This area contains the most and best Chinook spawning habitat and includes bull trout spawning habitat. The measures include:
 - 1) Implementing conservation improvements to reduce the total water diverted during the low flow season (August-Oct 15) from 5.0 cfs to 1.8 cfs and to reduce the amount spilled at the settling tank from 1.0 cfs to 0.25 cfs.
 - 2) Creating a new tailrace that would capture outflow from the fish pond (0.3 cfs), which currently dissipates subsurface in the Chiwawa River floodplain, and redirect it into Phelps Creek.
- E. Another benefit of the tailrace relocation measures are that water would flow through 340 feet of a riparian environment and would provide additional juvenile rearing habitat, adding a total of 858 feet of aquatic habitat. The new tailrace would have an average slope of 3.5% which is suitable for juvenile salmonids.
- F. Maintaining a lower, minimal flow (0.25-0.50 cfs) through the existing tailrace would preserve the existing lentic and wetland habitats; it would retain the helicopter bucket dipping site used for fire suppression in the upper section; and it would preserve 70 linear feet of the existing juvenile rearing habitat.
- G. There currently is no diesel engine at the site. Introducing a diesel engine would adversely affect other environmental attributes, and greatly increase the risk of spill to the pristine waters. This certification is based on the premise that a diesel generator will not be introduced to the site.

requests that such measures be submitted to it for its approval, Trinity shall petition FERC to so amend the license.

II. INSTREAM FLOWS FOR FISH

- A. Trinity shall operate the project such that the total water diversion at the existing diversion dam during the low flow months (August 1st through October 15th) is limited to an instantaneous maximum of 1.8 cfs. Flow restriction devices at the diversion dam and flow gage monitoring at the tailrace will be used to control and monitor flow.
- B. Trinity shall install computerized load management efficiencies to reduce peak load demand which would reduce the amount of water needed at the power plant by 0.25 cfs. This should reduce the current demand of 1.5 cfs to 1.25 cfs during the low flow season.
- C. Trinity will reduce the amount of water spilled at the settling tank to a maximum of 0.25 cfs during the low flow months based on the proposed water budget.
- D. If additional power plant efficiencies reduce the amount of water needed at the power plant, the first 0.25 cfs reduction from the 1.25 cfs used at the power plant may be used to increase the amount spilled at the settling tank (increasing it to an instantaneous maximum 0.5 cfs). Any additional efficiency reductions, beyond the first 0.25 cfs, will be used to reduce the total water diverted during the low flow months from the current maximum of 1.8 cfs. Additional flow restriction devices will be installed to meet the new instantaneous maximum flow limit.
- E. Trinity shall maintain the beneficial uses of the existing tailrace (635 feet to the Chiwawa River) with a minimal flow of 0.25 cfs except during the low flow months when no flow will be released down the existing tailrace to the Chiwawa River. Except during the low flow months, if the beneficial uses are not maintained, the flow may be increased up to 0.5 cfs, but still will be zero during the low flow months. This determination of an increase to 0.5 shall be made by agreement among the relevant management and regulatory agencies (Ecology, the USDA Forest Service, Washington State Department of Fish and Wildlife, US Fish and Wildlife Service, and NOAA Fisheries).
- F. At any time, including during the low flow months, up to 0.75 cfs may be put down the existing tailrace to fill the tailrace pond when needed for emergency fire suppression.
- G. The project shall provide and maintain the following instream flows at the locations identified, as shown in Table 1.

- 2) Consistent with WAC 173-201A-100(7) and -110(3), a mixing zone is established within which the turbidity standard is waived. The mixing zone is established to allow only temporary exceedances of the turbidity criteria during and immediately after project construction. The temporary turbidity mixing zone shall be as follows:
 - a. For waters up to 10 cfs flow at the time of construction, the point of compliance shall be 100 feet downstream from activity causing the turbidity exceedence.
 - b. For waters above 10 cfs up to 100 cfs flow at the time of construction, the point of compliance shall be 200 feet downstream from activity causing the turbidity exceedence.
 - c. For waters above 100 cfs flow at the time of construction, the point of compliance shall be 300 feet downstream from activity causing the turbidity exceedence.

B. Construction Water Quality Protection Plan (WQPP)

- 1) A water quality protection plan (WQPP) shall be prepared, and followed, for all in-water construction work related to the project. The plan shall include descriptions of all applicable Best Management Practices (BMPs) for in and near-water work. It should include procedures for monitoring water quality during construction, actions to implement should a water quality exceedance occur, and procedures for reporting any water quality violations to the Department of Ecology. The WQPP shall include all water quality protection measures consistent with a Hydraulic Project Approval (HPA) for the project.
- 2) Turbidity and dissolved oxygen shall be monitored 100 feet upstream of the location where in-water construction is taking place and at the point of compliance during construction. Samples shall be taken at a minimum of once each day during construction in or adjacent to any water bodies within the project area that may be affected by the construction.
- 3) A copy of the water quality protection plan shall be in the possession of the on-site construction manager, and available for review by Department of Ecology staff, whenever construction work is under way.

C. Minimum Best Management Practices for Construction

- 1) Work in or near the waterway shall be done so as to minimize turbidity and other water quality impacts.
- 2) The work shall include all reasonable measures to minimize the impacts of construction activity on waters of the state. Water quality constituents of particular concern are turbidity, suspended sediment, settleable solids, oil and grease, and pH. These measures include use of Best Management Practices (BMP's) to control erosion and sedimentation, proper use of chemicals, oil and chemical spill prevention and control, and clean-up of surplus construction supplies and other solid wastes.

of the course of action taken. The parameters include temperature, pH, dissolved oxygen, turbidity, sheen observed from petroleum products, and fish dying.

C. Monitoring Plan Modifications

- 1) A more rigorous water quality sampling program for the listed parameters or additional parameters may be required by Ecology if necessary to protect water quality in the future based on monitoring results, regulatory changes, changes in project operations and/or requirements of TMDLs or to otherwise provide reasonable assurance of compliance with state water quality standards.
- 2) Trinity may petition Ecology to modify or eliminate parts of the monitoring program after a period of five years.

V. OIL SPILL PREVENTION AND CONTROL

A. Standards

Chapter 90.56 RCW prohibits any discharge of oil, fuel or chemicals into state waters, or onto land with a potential for entry into state waters.

B. Oil Spill Prevention, Containment, and Countermeasure Plan

An Oil Spill Prevention, Containment, and Countermeasure Plan must be prepared that covers all oil-filled equipment to be used at the site. The plan must include the following Best Management Practices (BMPs), at a minimum. The plan must be kept on site, in the possession of the person in charge of construction oversight, at all times during construction.

C. Minimum Best Management Practices for Spill Prevention

The following minimum BMPs apply:

- 1) Care must be taken to prevent any petroleum products, paint, chemicals, or other harmful materials from entering the water.
- 2) Visible floating oils released from construction or project operation shall be immediately contained and removed from the water.
- 3) All oil, fuel or chemical storage tanks shall be diked and located on impervious surfaces so as to prevent spills from escaping to surface waters or ground waters of the state.
- 4) Fuel hoses, oil drums, oil or fuel transfer valves and fittings, etc., shall be checked regularly for drips or leaks, and shall be maintained and stored properly to prevent spills into state waters. No refueling of equipment shall occur over or within 50 feet of rivers, creeks, wetlands, or other waters of the state. Proper security shall be maintained to prevent vandalism.
- 5) No emulsifiers or dispersants are to be used in waters of the state without

provisions, standards, criteria or requirements shall also apply to this project and any attendant agreements, orders or permits.

- D. Trinity shall obtain Ecology review and approval before undertaking any change to the project that might significantly and adversely affect the water quality (other than project changes required or considered by this Order).
- E. This certification does not exempt compliance with the state's Shorelines Management Act.
- F. This certification does not exempt compliance with other statutes and codes administered by federal, state and local agencies.
- G. This certification will cease to be valid if the project is constructed and operated in a manner not consistent with the application for certification, or the attached conditions of the certification.
- H. This certification will cease to be valid and the applicant must reapply with an updated application if five or more years elapse between the date of the issuance of this certification and receipt of federal license.
- I. This certification will cease to be valid and the applicant must reapply with an updated application if the information contained in the application is voided by subsequent submittals to the federal agency.
- J. Ecology reserves the right to amend this Section 401 water quality certification if it determines that the provisions hereof are no longer adequate to provide reasonable assurance of compliance with applicable water quality standards or other appropriate requirements of State law. Such determination shall be based upon new information or changes in (i) the construction or operation of the project, (ii) the characteristics of the water, (iii) water quality criteria or standards, or (iv) effluent limitations or other applicable requirements of State law. Amendments of the 401 certification shall take effect immediately upon issuance, unless otherwise provided in the order of amendment, and shall be appealable to the Pollution Control Hearings Board pursuant to RCW 43.21B. Ecology shall transmit such orders to the Federal Energy Regulatory Commission to update the Commission's records as to the current certification conditions.
- K. Ecology reserves the right to issue orders or to initiate legal actions pursuant to state law or federal law to enforce the requirements of this certification, state and federal water quality requirements and standards, and any other appropriate requirements of state or federal water quality laws. Such authority includes the rights to assess civil or criminal penalties under state and/or federal law, to order compliance, and to obtain injunctive relief.

CERTIFICATION:

Subject to the above conditions and in accordance with 33 USC 1341, RCW 90.48.260 and Chapter 173-201A WAC, certification is granted to Trinity Conservancy Inc. for the Trinity Hydropower Project.